VPN server with Ubuntu

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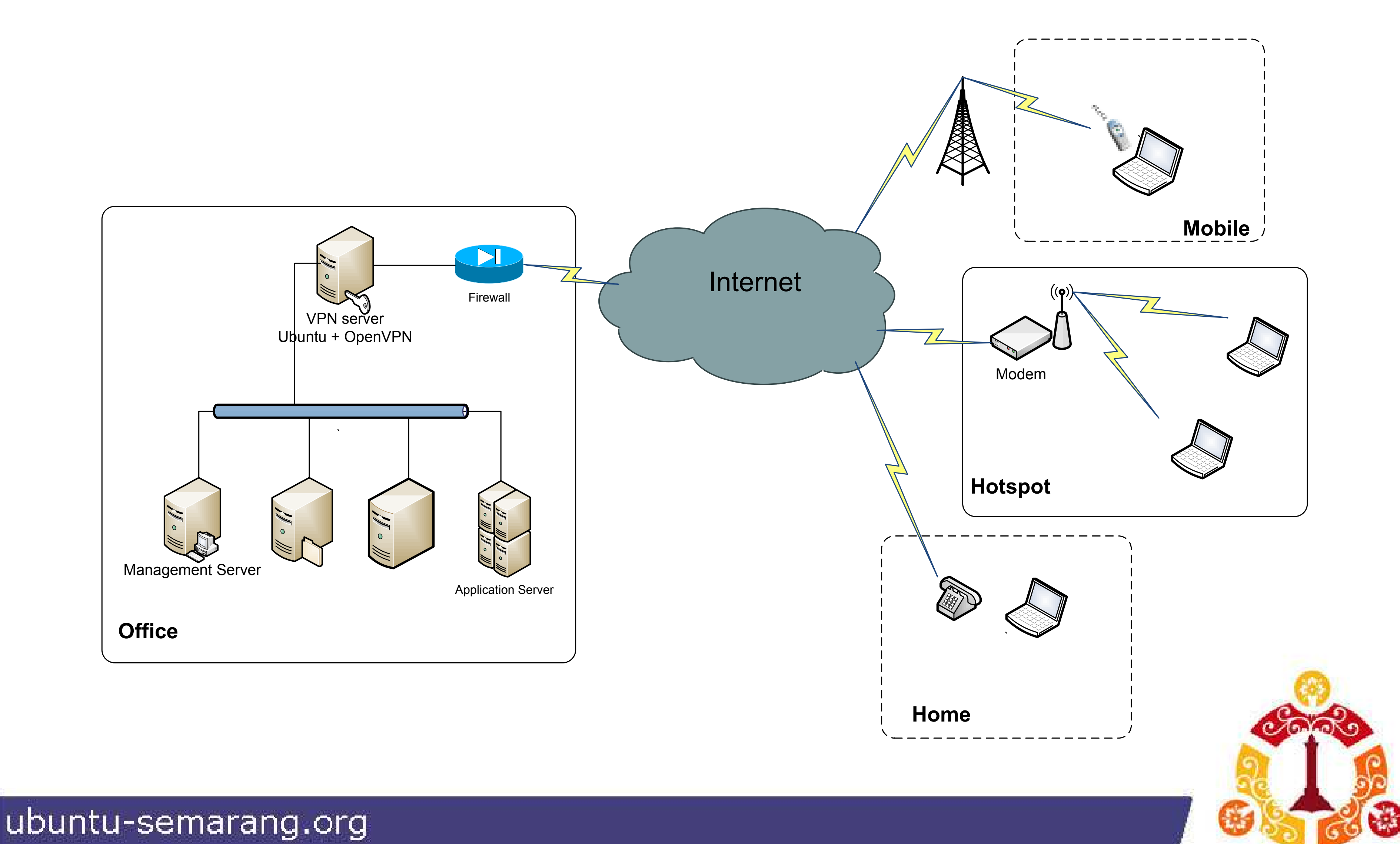


Ubuntu - OpenVPN

- OpenVPN : SSL VPN
- Tidak kompatibel dengan IPSec, L2TP, PPTP
- Portable : runs on Linux, Solaris, OpenBSD, FreeBSD, NetBSD, Mac OS X, and Windows 2000/XP



Konfigurasi Jaringan



OpenVPN server

1. Install OpenVPN

#apt-get install openvpn openssl

Copy direktori examples

#cp -R /usr/share/doc/openvpn/examples/ /etc/openvpn/

2. RSA key management

Masuk ke direktori easy-rsa

#cd /etc/openvpn/examples/easy-rsa/



OpenVPN server

Edit nilai default vars

```
#vi ./vars
export D=/etc/openvpn
export KEY_CONFIG=$D/openssl.cnf
export KEY_DIR=$D/keys
export KEY_SIZE=2048
export KEY_COUNTRY=ID
export KEY_PROVINCE="Jawa Tengah"
export KEY_CITY="Semarang"
export KEY_ORG="ubuntu-semarang.org"
export KEY_EMAIL="hafidzkoe@yahoo.com"
export KEY_COMMON="ubuntu"
```




OpenVPN server

Mulai konfigurasi server
#. vars

Copy file openssl.cnf ke direktori /etc/openvpn
#cp openssl.cnf /etc/openvpn
#./clean-all

Buat CERTIFICATE AUTHORITY (CA) CERTIFICATE/KEY
#./build-ca
ca.crt dan ca.key akan tersimpan di direktori key



OpenVPN server

Membuat server key

#./build-key-server server

Pastikan informasi yang dimasukkan sama dengan informasi waktu menjalankan build-ca. Sehingga konfirmasi *Sign Certificate* dan *Commit* keluar.

Generate key untuk client

#./build-key client1

#./build-key client2

#./build-key client3

... dst tergantung jumlah client yang diijinkan mengakses

Membuat parameter DH (Diffie Hellman)

./build-dh



OpenVPN server

3. Buat konfigurasi server

#vi /etc/openvpn/server.conf

```
port 1194
proto udp
dev tap
ca /etc/openvpn/keys/ca.crt
cert /etc/openvpn/keys/server.crt
key /etc/openvpn/keys/server.key
dh /etc/openvpn/keys/dh2048.pem
ifconfig 10.20.100.1 255.255.255.0
ifconfig-pool 10.20.100.2 10.20.100.10
255.255.255.0
server 10.20.100.0 255.255.255.0
```

```
user nobody
group nogroup
key-method 2
persist-key
persist-tun
status openvpn-status.log
verb 3
push "route 10.11.129.0 255.255.255.0"
keepalive 10 120
comp-lzo
```




OpenVPN server

4. Menjalankan OpenVPN

```
#/etc/init.d/openvpn start
```



OpenVPN client

1. Install OpenVPN

#apt-get install openvpn openssl

2. copy key & sertifikat “ca.crt”, “client.key”, “client.crt” dari direktori keys di server ke pc client.



OpenVPN client

3. Buat konfigurasi client

```
#vi /etc/openvpn/openvpn.conf
dev tap
ifconfig 10.20.100.2 255.255.255.0
port 1194
verb 3
remote [ip.open.vpn.server]
ca /etc/openvpn/keys/ca.crt
cert /etc/openvpn/keys/client1.crt
key /etc/openvpn/keys/client1.key
```

4. Jalakan openvpn

```
#/etc/init.d/openvpn start
```